SANITARY SUPERVISION OF BAKERIES AND RESTAURANTS.*

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The inspection of foodstuffs from the market to the table has not engaged the attention of the sanitarian or the public to the extent that it deserves. While much interest has recently been manifested in the inspection of foodstuffs for the market, little attention has been given to the manner of handling them after leaving the market and while undergoing preparation for the table, a period during which foodstuffs are subject to many manipulations, oftentimes by careless and unscrupulous persons who have only a shortsighted monetary interest to serve. The bakeries and public kitchens are the places where many of the tragedies of the digestive system are planned. All cases of ptomaine poisoning do not originate in the butcher's cold storage or market, but often in the poorly kept and over-worked icebox of the restaurant or eating house.

How often infectious diseases are contracted in these eating houses we do not know, but we do know that many times the exposures are very great. Where the napery and table ware are well boiled, and no food once served on the table is again returned for another consumer the danger is greatly minimized.

In bakeries conducted without proper regulation and supervision you would be surprised to find that there is a total disregard for sanitation. It may be that the bread and pie served on your table is baked in a place that the flies, dogs, cats, chickens and rats have free access to. I have seen a table on which pies were being made literally black with flies, a hen's nest in one corner of the room; and the excuse given for not having screens on the windows and doors was, that the cooking was done at night time when the flies were not active.

Breadstuffs are often hawked around town through the dust-laden streets and alleys uncovered, handled by dirty and, perhaps, diseased hands, and are left, unprotected from filth, on the back porch.

Should you go into the kitchens of some restaurants or eating houses, perhaps where you get your meals, you would be surprised to find the floor reeking with filth, odors arising therefrom not at all conducive to a good appetite; the icebox sour and containing strong evidence of incubative purposes; the water closet in very close proximity to the food, the toilet room being ventilated through the cookroom; and the cook and his helpers suffering from some form of infectious skin disease. Rats, flies and other insects playing and feeding on the food which is to be served; the dishes run through lukewarm water, and wiped, if at all, with a dirty cloth; the knife and fork retaining a visible portion of the egg some poor tubercular person ate at the meal before; the scraps from the table carefully sorted, and placed aside to be served at the next meal; the milk allowed to stay in the alley near the slop cans until received with dirty hands, then robbed of its cream and the cans set on the floor where the insects and cats have free access to the contents. In these places also alterations and substitutions are carried on to a great extent. The patrons, it is needless to say, do not see these conditions, and do not realize the danger therefrom, therefore the careless and unscrupulous restaurateur or caterer does not feel called upon to make any changes so long as he is not losing trade.

The sanitary regulation of bakeries, "pie factories," restaurants and eating houses by good sanitary laws and a system of inspection will bring about such beneficial results as will be appreciated by the most skeptical. The chief points to be considered in these regulations and inspections may be summarized as follows: a sanitary building, by which we mean a building constructed of such material and in such a manner that it can be kept clean and well drained, mouse and fly, or, in fact, insect proof; provided with separate rooms for storage, cooking, dressing, and toilet purposes. The bread and pies handled by healthy, clean and careful persons. The distribution of breadstuff should be made in a manner to protect it from dust, flies, and uncleanly or diseased persons.

In public eating houses there are all kinds of food to be protected from insanitary handlings and surroundings. The store-rooms ought to be kept clean and free from insects and mice and rats; the ice chest should be clean and uninfected; the floors clean and well drained, and proper provision provided for scalding and cleaning all table ware; the workers should be free from infectious diseases and clean in person, and the food should be wholesome and uncontaminated by insects or filth of any kind.

SYMPOSIUM ON PURE FOOD.

Discussion.

Prof. Jaffa, Berkeley: It seems to me that these are very interesting and instructive papers and exhibit great progress in the pure food movement. Such efforts are a wonderful help and encouragement to those who are engaged in this movement. think such efforts are along the right line,educating the public or layman. If the public is not educated then our work is not going to be of value. Who is better able to educate them, primarily, than the doctors, and secondarily, the Mothers' Clubs, because you will find that whenever a Mothers' Club takes hold of a proposition of this kind, that proposition is successful. If a Mothers' Club should boycott certain goods, the dealer of such goods would have very small chance of selling those goods. Illustrations for such cases are many. Take the case of the dried fruits, and at the present time that is an extremely important question on account of the agitation going on,—and if the public was educated to understand that these highly yellow colored fruits, no matter of what kind, are not so nutritious and do not possess as fine a flavor, there would not be the demand for yellow dried fruit. If they understood in the case, the large amount of sulphuric acid they contain, there would be no sale for them. the layman does not understand and consequently these articles are the ones which are bought. It is the same way with the desiccated vegetables. Vegetables are a food the value of which is not thoroughly appreciated by many to-day, but the fact that they are nutritious has led to their being treated in such a way that they can be imported. In the preparation of some of these vegetables, bleaching

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is carried on to such an extent that the vegetables contain 1% of sulphuric acid. Are these nutritious or healthful? No. How many of us thoroughly understand the value of skim milk. Many think that the nutriment is gone and skim milk has little value. In a good many cities to-day the sale of skim milk has been prohibited. Such ideas are carried altogether too far. We all know of the sale of skim milk in Denmark where they have the different grades of milk and no man is afraid of it. So our line of improvement has a great deal to do with the matter of educating the public. If we look over the amount of adulteration which has been practiced, less than 15% is due to preservatives and the rest to the fruit. With reference to the meat question, the sophistication is decidedly less during the past two years than it was previously, owing to the United States meat law. That exercises supervision on products manufactured in one state and sold in another. The goods manufactured and sold in the same state, are not supervised. That is why it is such a necessity to have a good state law. The Federal laboratories cover only goods manufactured in one state and sold in another. With reference to the meat packing houses which manufacture any class of goods to be sold outside of California, they are subject to Federal inspection and that is extremely rigid and the law is enforced. The Federal law prohibits the use of all preservatives and only allows the common preservatives like smoke and vinegar. The results certainly show the benefit of such a law. In the case of the mixture of mustard oil for salad and cooking, it is just as good as olive oil, but the question that is raised is over the labeling, for that is misbranding. Another issue is taken over the weights. So many boxes are labeled 25 pounds, whereas they contain only 19 or 20. When this is detected the manufacturers claim that the other fellow is doing it and that there are a great many other cases of misbranding. The United States law, however, is enforcing proper labeling of these materials and taking away the privilege of putting on any kind of labels. Much is also being done with regard to coffee substitutes.

Dr. Ward, University of California: tened with a great deal of interest to the accounts of the progress that Los Angeles has made along the lines of clean milk. Pasadena is to be congratulated also upon having brought about the tuberculin test. I have participated in two failures of that kind and can appreciate the difficulties of this work. Palo Alto tried this scheme several years ago and failed. Berkeley has tried for three or four years to bring about these results and has practically failed. The matter is still hanging fire. The trouble is that we have neither the medical profession nor the laity with us. I want to emphasize the difficulties in bringing about that great change in dairy industry which the tuberculin test means. In Berkeley to-day 18% of our cows are tubercular. Dairies with 100 or 200 cows supplying San Francisco with milk have 20% or 25% tubercular cows. If this fact can be hammered home to you,—the medical man,—and its significance, you will realize the necessity for the crusaders to have your support. We can have more ordinances passed in that way and we can stop the evil by state appropriation. The state will not appropriate the money. It has been tried in a dozen states and has failed. We can only get at this by education of the consumer and that must come through the family physician. When the consumer demands it he will get it. Another phase of progress here in the south is the continual manufacture. here in the south is the certified milk movement. Cakland made a little start in this line several years ago, in the absence of action by the local medical society, through the Oakland Home Club, which took up the matter and assumed the responsibility. We have had a dairy there for three or four years which has been distinctly in the process of evolution.

I think no one realizes, outside of those working on the subject, as we do, the improvement that that dairy has shown. It is getting to a stage where it is very satisfactory. It has been a case of evolution of the dairy in the hands of the poor man. He had not the capital to put in it and so he made his progress in proportion to the demands of the people. He has 93 cows now supplying Berkeley. San Francisco has just now established a certified dairy which is only a week or so old. I recommend that the San Francisco physicians urge the support of that dairy by notifying the public of it.

Dr. F. M. Pottenger, Monrovia: Clean milk is a very costly proposition. We have voted for a good dairy (in my town), we have a tuberculin tested herd and have a clean dairy, but we have great trouble to get the dairymen to understand what we want. They are dirty and cannot understand our principles. I can easily see what trouble the uneducated man would have in getting these men to do what we ask. Our milk is now produced at the cost of 25 cents or 27 cents a gallon. Milk cannot be produced at only the one price. We must educate the people that they must pay for this cleanliness. But it is the same in other matters, we have had difficulty in this country in getting things produced clean. Dr. Powers has detailed to you the conditions of kitchens. It is all so, only we do not see these things as they are. I have had great difficulty in getting a clean cook, and now that I have a man who understands what I mean by cleanliness and is willing to do what I want, he has to discharge his under help four or five times a week in his endeavor to find the right man. I have, however, a kitchen I am proud of. But my cook has to discharge his men for dirtiness and because they will not obey rules, and he has great difficulty in finding men who can understand what cleanliness really is. The class of men doing kitchen work in this country to-day are a lot of hoboes and one simply has to stand over them with a club. You will find that it is a mighty hard thing to get things produced as they should be produced. I have been giving talks to our help at home in an endeavor to have them co-operate with us, but the average man does not care. These are the men who cook our food and handle our food throughout the country.

Dr. Geo. A. Hare, Fresno: I would like to emphasize the necessity for the medical profession to back up this movement for pure milk. Some years ago some member of the Board of Health in Fresno inaugurated the pure milk movement. Every cow in the county was certified and tagged and regis-tered and had the tuberculin test. We maintained tered and had the tuberculin test. We maintained this for a number of years and had good milk. It closed up about one-third of the dairies which supplied Fresno, while two or three organized and milk went up two and three cents a quart. The Board of Health had the responsibility and they did not lose any prestige and the dairymen flourished, while the public was satisfied. The point is this, that so long as the Boards of Health of our cities are dominated by politicians, so long will this movement be a fail-The moment we have a Board of Health manure. ipulated by political interests, just then will it fail. There is constant failure before us because every election we have these places in the Board of Health filled up by political pull. It keeps the Board of Health crippled and is demoralizing to the best of work. Let the medical profession exert an interest that will manage and control every Board of Health; that is a logical part of the duties of the profession, it seems to me. If we insist upon the Board of Health being under the medical profession, we lay the first foundation. Without this I believe our work will prove a failure. This work is work of reform and it is to get the foundation so that we can get control of the Board of Health, for which we must strive.

Dr. Chas. G. Levison, San Francisco: I would also like to say a few words with regard to the milk supply being controlled by these municipal Boards of Health. I do not think that that is the way it should be. The milk supply must come as a matter of state legislation. In the City of San Francisco the milk comes from herds of cows that are tuberculous, and the milk comes into the city from surrounding counties, so that the Board of Health cannot control the care of the cows. The Board of Health has power to control the milk situation only up to a certain point, but not to determine the source of the milk. When it was called to my attention that the milk which we receive in San Francisco was the milk from tuberculous cows, it was a matter of great astonishment to me. The people are not familiar with that fact. This problem is one of the greatest magnitude and attempts have been made in a number of cities to rectify milk conditions, and these attempts have been failures. If we attempted to destroy the cows that are tuberculous, it would be a tremendous thing. The subject must be approached in a very slow manner. Ward, of the University, has said that tuberculosis among the cows has been eliminated by isolation of cows after the cows have calved and the calves have been raised on sterilized milk. Eventually this would eliminate the tuberculous cow and it seems to me that this method would be a correct one.

Dr. T. C. McCleave, Berkeley: I cannot agree with the speakers who have brought up the question of politics. I think the introduction of pure milk depends upon the attitude of the family physician among his patients. In my own practice, for instance, I have had to do with a great many families having small children. Not one family is supplied with any other milk than that from the certified dairy. This is the whole proposition. Probably when we tell these mothers that they must get their milk from the certified dairy, they will reply that they cannot afford 12½ cents and 15 cents per quart; that she is only paying 10 cents at the present time. I then explain to her the value of the other milk, that the baby must have it, and that the extra cost per month for the certified milk would only amount to \$1.25, and I tell her that if she says she cannot afford to pay \$1.25 per month more for the care of her child, then I do not want anything more to do with her family. I have never had a mother tell me yet that she would not afford this extra amount per month. If every physician having to do with children would put the matter up to the mothers, it would not be long before the mother would be taking the pure milk for her children. I watch the milk myself. We have been handicapped by only one dairy. When the mothers complain that the milk does not look good, I order that they bring the milk to me at my office and I have it examined and so keep track of its condition. Some of this milk looks quite pink and we find out that the cows have been milked too soon after calving and we have such things stopped. Show the people that you are interested, and as I say, if you family physicians will do this, it does not make a particle of difference what the politicians do or whether the tuberculin test is enforced or not. When pure milk is demanded by the people, pure milk will be supplied, and not before.

Dr. J. C. Spencer, San Francisco: It has impressed me that this whole matter is a proposition of educating the public. Of course the matter of the price of pure milk is a very serious factor. As I understand from the dairy authorities, they cannot produce certified milk as long as it is sold at 15 cents a quart. By way of suggestion, if the lay-public is to be educated we must extend the first process of education. If any given community has a dairy where certified milk is produced, a simple means would be to take the owners of the other dairies and force

them to come to the dairy where certified milk is produced and let the certified dairy stand as an object lesson.

Dr. Martin Regensburger, San Francisco: This is clearly a case of education. The public must become interested and the school children and the women must be educated. If the doctors were to go before the teachers' institute and talk to them, and educate the children, a great deal of advance could be made. It is a matter of the most importance.

Dr. W. S. Fowler, Bakersfield: One of the best means for educating the public has been neglected. The greatest means for improvement is that of public information through the press. Dr. Aiken of Fresno says that he has no doubt but that the milk would have been improved materially if the newspapers published data comparing the different areas and their progress. If competition can be brought about an immense amount of labor can be saved.

Dr. W. C. Rucker, U. S. P. H. and M. H. S., San Francisco: For the information of the members I will say that there has been issued quite recently a volume of important studies on this milk question. It is a study of the milk in the District of Columbia. Those of you who are interested will find this book worth while. It is the most exhaustive thing I have seen, and was recently published by the Public Health and Marine Hospital Service.

Dr. Jas. H. Parkinson, Sacramento: This whole question consists of the education of the public. If the public is properly taught there is no question but that we can accomplish all we signify is to be done. In this connection we cannot but wonder at the situation in San Francisco at the present time. The Mayor of 1908 has thought best to put up a Board of Health consisting of five laymen and two physicians. Whether this was done from the sanitary or the political standpoint I do not know. think that such a step should be considered. I think we have several new problems before us to-day. As it has been pointed out in Los Angeles, we have the question of housing. Our cities are becoming larger and we are growing up in the air as well as along the ground. In addition to the Japanese and Chinese we have the European population, and these all present some problems and difficulties. With regard to the milk supply and the milk control, it has been questioned whether the Board of Health can control the milk problem from outside. It can be done, I think, by the public being informed. In Sacramento our milk is coming from out of town. We have compelled the milk men to get numbers and be registered. The pure milk and the certified milk is going to be a difficult thing to bring about in our country. When you consider the neighborhood of the dairy yard and remember our rainfall, and that the dairies are along the bottoms of very large rivers, it is going to be impossible to keep decent dairy yards. We can build them on mounds and they will be in mud. It is impossible to keep things clean. I do not know what is the best thing to do With regard to the care of the milk in transit a great deal has been accomplished. You know what it generally means to take the milk to town and bring back garbage in the empty cans. Much has been done toward rectifying this condition. Another problem against which we contend is the use of the milk cans for making coffee in restaurants. milk comes in, the coffee is added and the cans are put right on the range. The public must be taught the importance of these questions. Another point is the question of contamination with flies. Enormous stress should be laid upon that point. Flies are our arch enemies. We also have to deal with the question of dust and exposure of vegetables. The vegetable man complains that he cannot sell fruits and vegetables unless they are exposed to the view of the public and are where they can be handled. We are going to try to stop this. If we can only show the public that it is for their benefit that we want these things and that it is not going to cost them a cent, we will be able to get their co-operation.

Dr. Edward Gray Eldridge: This question has come to my attention in a somewhat different light than to the rest of the profession. I am serving the State of California at the California Home for Feeble-minded. We have a herd there of about fifty-four or fifty-eight cows. The state sends annually and sometimes semi-annually a veterinary to inspect this herd. Two years ago the result was that we lost twenty-three of our herd on account of the reaction to the tuberculin test. You would be surprised to know that often it is not the lean and thin cows, but the very finest and choicest animals which will react to the tuberculin test. We have had postmortems on every cow which has been condemned and every time the results show the advantages of the tuberculin test. We have found the abscesses, with the cheesy degenerations, in no matter how healthy the animal which reacted. Since this inspection two years ago we have not lost so large a number, because the herd was so thoroughly weeded out. At Eldridge we have under our care epileptics, feeble-minded, impeciles, idiots, etc. They are not the cream of the land, but we undertake to care for the health of the children committed to us. If the state can take care of its least desired population, certainly the medical profession should join together in taking care of the great body of children and adults under its care.

Dr. Wm. Simpson, San Jose: We tried years ago to force every dairy to the tuberculin test in Santa Clara County. We passed ordinances to that effect and put two-thirds of the dairies in Santa Clara out of business because of the cows that were killed. We taught the people of the county that it was necessary to have this law and that the dairymen could not sell a cow in Santa Clara County unless that cow had been tested. For a few years we have had no regular inspection, but in the last year this has been taken up again and no dairyman can sell a quart or pint unless he has a license which carries with it the necessity of certified milk and a clean dairy. These rules are not only from the tuberculosis standpoint, but they average up what the milk inspector thinks is the proper standpoint. At first we prosecuted every milkman who sold impure milk and revoked the license when the milk was reported below the standard. Our milk comes from quite a distance outside of the county, from Gilroy and Watsonville. A few years ago the Boards of Health wanted a satisfactory Dairy Bureau, but the milkmen assessed every milk dairy in every city \$2 a cow and they went to Sacramento; the Dairy Bureau is now composed of milkmen.

Dr. F. L. Rogers, Long Beach: I feel that the matter of pure foods is not to be passed by without a little more being said along the line of some of the practical results of work of this kind among the little folks in our public schools. There has been started in different parts of this state a movement, the result of which shows perhaps as well as any other movement which we have had, the need for work of this kind in the interest of the growing chil-In Los Angeles there has been in connection with the public schools a movement for the inspection of the children. The Board of Health and the Board of Education have taken this work up in an active way and they now have examinations for the public schools. The results of that examination are such that it seems to me that they cannot but see the great importance of the inspection along the line of pure foods, pure milk, and also the benefit from pure air and sanitation and other matters in general. In our little town of Long Beach the work was undertaken in 1906, and while it was a preliminary work there, the board took the matter up with the idea of first determining how many of the chil-aren were defective in sight, hearing, throat and nose. The work was placed in my hands and I have just completed the work of examining 3,480 children in the public schools. Incidentally I have examined the children's mouths and teeth, and you would be surprised to know how extremely few children have good teeth. There are less than twenty per cent with sound teeth, and I believe carelessness and adulterated foods are responsible for it. Sixty-one per cent are deficient in one of the four special senses. The greatest deficiency is the sight in one or both eyes, and there is also deafness and adenoids. These are just a few of the statistics that I remember, but the figures are to be had and also those of Los Angeles. the work has been carried on in a much more extended way, making the examinations of the whole body.

Dr. F. C. E. Mattison, Pasadena (closing discussion): One word with reference to the term certified milk. Certified milk means milk certified to for cleanliness. I am very glad to know of the work being done in Alameda County and that the owners have to sign agreements, and that a violation of the agreement means a fine of not less than \$500. dairyman has to come up to certain requirements and has to agree to furnish the dairy in certain ways and to do the milking in certain ways, and a viola-tion of this should mean a fine. In Pasadena we allow the certified milk a maximum of 20,000 bacilli to the cc. This has been coming down and we hope it will come down to the limit. When this dairy is in the perfect working order that we expect it to be, we will keep well below this amount. With regard to the organization of this work, the plan pursued by the Pure Food Commission has been to interest the ladies. You will find that if you get the women's clubs interested you can organize this work. Get the women of the clubs together and tell them the plans and the reasons and you will find that you have a force at work greater than any medical societies. In no other way could we have carried on this work if we had not interested the women's clubs. They have more wit than we have in getting the things that they want. The great thing to overcome is the ignorance of the laity. In our work we had our inspectors and we had meetings of the various bakeries; we had the representatives from the clubs and we laid the matter before them. I had in my possession bills from the vegetable houses and dealers in supplies who had been supplying these bakeries. I had bills for cases of rotten eggs which they use in these bakeries, adding a preservative. And when the representatives of the clubs and the laity understood the condition, with their help and that of the good bakeries, we carried our ordinance. The Medical Society of California is a power in itself if we use it properly. What we lack is organization. We must make each man feel that it is in his power to get the pure foods that we want.

Dr. G. H. Kress, Los Angeles: If the county of Los Angeles can get pure milk in five years, the State of California can certainly get it in five years. There is another point in which we need help. The County of Los Angeles, in order to get a grip on the dairies, asked that one of the city inspectors be deputized as a state inspector. In that way the interest of the state would be a safeguard. lieve that we will get clean milk in California in five years.

Dr. Stanley Black, Pasadena: With regard to the meat auestion, unfortunately all the meat which cannot pass the U. S. inspection is turned into the State of California. This should be stopped by the Boards of Health. We should combine with the United States in that regard. We have in Los Angeles an ordinance to inspect all slaughtered animals and it is negligible out well. In regard to the mals and it is working out well. In regard to the tuberculin testing of cattle, we should have state-ments with regard to what some of us are working for. We began the tuberculin testing of cattle in

Pasadena eight years ago. The public was not then interested and did not understand. But every cow there must be tested and we are now using the Government tuberculin, which is the best. With this we are working in conjunction with the Marine Hospital and the meat inspectors of Los Angeles. In testing the cattle we have a great-deal of trouble with the veterinary and we are giving him pointers. There were hundreds of cows that were sacrificed that were never tested at all. Now we require a report from every cow tested, and all of the cows must be branded. If we can only spread this work throughout the state it will insure a state law.

LUETIC STIGMATA OF IMPORTANCE TO THE GENERAL PRACTITIONER.*

By HERBERT C. MOFFITT, M. D., San Francisco.

In consultation, as in ward work, the question of an old syphilitic infection must frequently be raised. Wise skepticism is nowhere more in place than in dealing with a negative history in face of a suspicious clinical picture. Crocker got no history in 20% of his cases of tertiary syphilides. The dictum of Gowers is to be remembered,—"If there has been any possibility of exposure to infection, the disease cannot be considered to be out of the question." Of the greatest importance at times is the suggestion given by this or that earmark that indefinite and obscure symptoms may be due to syphilis; a tibial periostitis may give another direction to the treatment of an ill-defined "neurasthenia"; an Argyll-Robertson pupil may explain the true nature of obstinate intercostal pain; a palmar sphilide may change the prognosis of an irregular liver tumor. It is the aim of this paper to emphasize anew the importance of certain stigmata in diagnosis.

- I. The facies may be suggestive. The small, wizened, puckered face of congenital lues needs no description. There is a puffy, stupid, greasy face rather peculiar to cerebral lues. Scars at the hair border or over the forehead, a sunken nose, ptosis or strabismus excite suspicion at first glance.
- The skin shows many signs. This is not the place to describe the varied dry or ulcerative late syphilides. They rather characteristically lack polymorphism and are apt to be regional. A woman seen some years ago with cerebral lues had a tubercular syphilide of the nose and adjacent cheek. A man with gummata of the liver had rupia of the trunk. A man with great pain and stiffness of the back wandered to several springs for relief of rheumatism; he had a beautiful bilateral palmar eruption, and got perfectly well under mixed treatment. It should be remembered that this palmar psoriasis may occur many years—Fournier cites 15 and 31 years-after infection. Sharply cut, round, crescentic or serpiginous ulcers, especially if indurated and grouped regionally, are most suspicious. Frontal ulcers or scars are not common. A woman seen 9 years ago in the clinic had vomiting and headache with optic neuritis and circular pigmented frontal scars. A young woman for years treated for lupus had serpiginous pigmented scars over the trunk and

both things, and massive thickening of both tibiæ. An old physician had for two years a large and tender liver referred to malaria and peculiar nocturnal suffocative attacks labeled asthma. He had extensive oval ulceration over the front of both tibiæ about the middle of the leg that had been treated for three years as varicose ulcers. Under iodide and mercury he made a rapid and complete recovery. Varicose ulcers are usually below the mid-leg and on the inner side; ulcers near the knee are apt to be luetic. Ulcer of the penis may recur at the site of the original chancre, and be mistaken, if indurated, for a recent infection; a young man seen during the last three years has had three recurrences of an indurated ulcer in the sulcus at the seat of the original sore.

Linear scars about the lips may mark congenital victims. A young woman seen lately with syphilitic joints had these puckered scars as the only stigma. Depressed, circular, brown pigmented scars grouped over the trunk or about the knees or over the shins are frequently of sphilitic origin; the scars of trauma or varicella most often lead to confusion. Recurrent herpes of the penis should be given some weight in diagnosis. A young man with indefinite night terrors and headache was long labeled "neurasthenic" until a history of recurrent herpes gave hint of a specific origin of the symptoms. He got well under specific treatment, and his two children, seen later, were typical congenital syphilitics. A man with peculiar cerebral symptoms gave history of several infections with gonorrhea, but knew of no lues. He had recurrent herpes genitalis, and was cured by a course of mercury and iodide. A man with tabes had recurrent attacks of herpes for years.

The notched and peg-shaped teeth of congenital cases need but to be mentioned. In a boy of eight, broken, thickened and rudimentary finger nails gave a hint of the cause of long standing enlargement of liver and spleen.

- 3. Glands. Enlarged posterior cervical and epitrochlear glands mark a recent rather than old infection. They are frequently found large without any evidence of syphilis, and their importance in diagnosis of old cases has been much overrated.
- 4. Bones. Exostoses are frequently syphilitic. A man seen in 1899 had a painful tumor over the right parietal bone and Jacksonian epilepsy; both were cured by specific treatment. A man seen in 1902 had cerebral lues, a biceps contracture, a painful node on the right humerus and ulcers of the leg. A woman with scars on the tongue had a thickened right tibia. An old man seen this year with cerebral lues recovering under specific treatment had a thickened right tibia that at first suggested Paget's disease. Painful nodes on ribs or sternum are not rare. A man seen last week has had during 8 years painful nodes recur on parietal and frontal bones, both ulnar and radii, both humeri, scapulæ and femur.
- 5. The nose is frequently attacked from without and within by late syphilis. The deformities from external and internal destruction have already been mentioned. Rapidly obstructing gummata may

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